

CLAIMS

What is claimed is:

1. An implantable cardiac stimulation device for applying pacing stimulation pulses to a ventricle of a patient, the device comprising:
 - a pulse generator that is operative to generate the pacing stimulation pulses for delivery to the ventricle;
 - a posture detector that is operative to sense posture of the patient; and
 - control circuitry that is connected to the pulse generator and to the posture detector and that controls generation of the pacing stimulation pulses, wherein the control circuitry is operative to select an atrio-ventricular delay based solely on the sensed posture of the patient, wherein the control circuitry is operative to decrease the atrio-ventricular delay when the patient goes from a lying down position to an upright position, and to increase the atrio-ventricular delay when the patient goes from an upright position to a lying down position.
2. The device of claim 1, wherein the control circuitry is operative to select a first atrio-ventricular delay when the patient is in a first position and a second atrio-ventricular delay when the patient is in a second position.
3. The device of claim 1, further comprising an activity sensor that senses activity of the patient and wherein the control circuitry is operative to vary a pacing rate based on the sensed activity.

4. An implantable cardiac stimulation device comprising:
 - pulse generating means for generating pacing stimulation pulses;
 - posture detecting means for sensing posture of the patient;
 - and
 - control means for selecting an atrio-ventricular delay based solely on the sensed posture of the patient, wherein the control means comprises means for decreasing the atrio-ventricular delay when the patient goes from a lying down position to an upright position, and for increasing the atrio-ventricular delay when the patient goes from an upright position to a lying down position.
5. The device of claim 4, wherein the control means adjusts the atrio-ventricular delay by selecting a first atrio-ventricular delay when the patient is in a first position and a second atrio-ventricular delay when the patient is in a second position.
6. The device of claim 4, further comprising activity sensing means for sensing activity of the patient and wherein the control means varies a pacing rate based on the activity sensing means.
7. A method of applying pacing stimulation pulses to a ventricle of a patient, the method comprising:
 - sensing posture of the patient;
 - adjusting an atrio-ventricular delay based solely on the sensed posture of the patient; and
 - wherein adjusting the atrio-ventricular delay comprises decreasing the atrio-ventricular delay when the patient goes from a lying down position to an upright position, and increasing the atrio-ventricular delay when the patient goes from an upright position to a lying down position.

8. The method of claim 7, wherein adjusting comprises selecting a first atrio-ventricular delay when the patient is in a first position and a second atrio-ventricular delay when the patient is in a second position.

9. The method of claim 7, further comprising sensing activity of the patient and varying a pacing rate based on the activity sensor.